

re: Tuesday, 29/07/2008 4:57:45 PM  
 ser: Julie Lecocq

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : LONG STEP ASSEMBLY HIGH SKID LH
<b>Job Number</b> : 40792	
<b>Estimate Number</b> : 10270	
<b>P.O. Number</b> :	<b>Part Number</b> : D350591311
<b>This Issue</b> : 29/07/2008 <b>S.O. No.</b> :	<b>Drawing Number</b> : D3272 REV B
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : / / <b>Type</b> : LARGE FAB ASSY	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 40790	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 29/08/2008 <b>Qty:</b> 10 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>JLD 08.7.29</u>	
<b>Comment</b> : Est Rev:A 04.03.22 New issue KJ/RF	
Est Rev:B 07-06-09 Added D3272-1 JLM	
Est Rev:C 08-04-02 ECN1163 DD verified by:EC	
Est Rev:D 08-04-08 ECN1164 DD verified by:	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-311 CHG002 001 per NCR 08.08.22

2.0	D32721	Step
-----	--------	------

**Comment:** Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

STEP

BATCH: B 41344 ✓ SP 08.09.03

3.0	D30671	End Plate
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3067-1 End Plate B 40851 ✓

SP 08.09.03 (10x)

4.0	D32191	Plate
-----	--------	-------

**Comment:** Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3219-1 Support B 39262 ✓

SP 08.09.03 (20x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 40792

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod

~~128550~~  
108087

SAB 08/09/04

(10X)

(10X)

3-Grind End Plate flush

SP 08.09.04

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 08-09-04 (10)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SAB 08/09/04 (10LH)

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SP 08.09.05

(10X)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

SAB 08/09/07 (10)

10.0

D3065041

Step Leg Assembly Hi



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3065-041

Step Leg Assy

B38650

SAB 08/09/07

(10)

11.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 D3066-1

Spacer

B40342

SAB 08/09/07

(10)

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Date: Tuesday, 09/07/2008 4:57:45 PM  
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 40792

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

MS20600AD4W4

Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total : 160.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

16 MS20600AD4W4

Rivet

B107376 (7)

108827 (3)

SAD 08/09/07

13.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble Leg Assembly as per Dwg D3272.

Leave one rivet out until welding is complete.

SAD 08/09/07 (10)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SAD 08/09/06 x10 LH

15.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3067-1

End Plate

B 40857 ✓

SP 08-09-08

(10)

16.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod M108037

4-Grind End Plate flush

5-Install last rivet as per Dwg.

SAD 08/09/08 (10)

SP 08-09-08

(10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 40792

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

QC9

VISUAL WELDING INSPECTION



*Cpl 08-09-08 BC*



*(X10)*

Comment: VISUAL WELDING INSPECTION

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*S 08/09/09 KDH*

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

touch up alodine

*+ pressure wash  
MS 08-09-09*

*(X104H)*

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

*1:05*

OVEN TEMPERATURE:

*320°*

FINISH TIME:

*1:35*

*FL 08/09/09 (10)*

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3272 and QSI 005 4.4

*m 108892*

*FL 08/09/09 (10)*

22.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

*S 08/09/09 KDH*

23.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

24.0

D22303

Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2230-3 Mounting Lug

*40341*

*MS 08/09/10 (10)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 40792

Part Number: D350591311

Job Number:



Seq. #: Machine Or Operation: Description :

25.0 D2618 Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2618 Bushing

39260

AS 08/09/10 (K10)

26.0 D2732 Rubber Extrusion



Comment: Qty.: 1.0000 f(s)/Unit Total : 10.0000 f(s)

Rubber Cushion

4 x D2732 -030

batch:

N/A for ECF per NCR08.082

27.0 D32351 Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3235-1 Mounting Lug

39444

AS 08/09/10 (K10)

28.0 D3278041 Support Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D3278-041 Support Assembly

39265

AS 08/09/10 (K10)

29.0 D3595200300 RUBBER CUSHION



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

RUBBER CUSHION

batch:

N/A for ECF per NCR08.082

30.0 AN335A Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A Bolt

M106993

AS 08/09/10 (K10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 40792

Part Number: D350591311

Job Number:



Seq. #: Machine Or Operation: Description :

31.0 AN415A Bolt



per M108082



Comment: Qty.: 8.0000 Each(s)/Unit Total: 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN4-13A Bolt

M109059

Bar code change

SS 08/09/10

32.0 AN536A Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN5-36A Bolt

M108599

SS 08/09/10

33.0 AN960JD10 Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10 Washer

M109059

SS 08/09/10

34.0 AN960JD416 Washer



Comment: Qty.: 16.0000 Each(s)/Unit Total: 160.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

16 AN960JD416 Washer

M108161

SS 08/09/10

35.0 AN960JD516 Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD516 Washer

M108672

SS 08/09/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 40792

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

MS21042L3

Nut

THH  
THH



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3 Nut (or -3)

M108701

SS

08/09/10

(X10)

37.0

MS21042L4

Nut

THH  
THH



Comment: Qty.: 8.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS21042L4 Nut (or -4)

M167499

SS

08/09/10

(X10)

38.0

MS21042L5

Nut

THH  
THH



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L5 Nut (or -5)

M108161

SS

08/09/10

(X10)

39.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

S

08/09/10

(X10)

40.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-311

Location: C

8/9/10

(10x)

SIP

41.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/09/11

Job Completion



38a

2x 02856400-720

B

B371007

per NCR 08-082

u 08/09/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN <i>qp</i>	DRAWN BY <i>B</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG SCALE NTS	
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

**RELEASED**

07.06.04 *[Signature]*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

**GENERAL NOTES:**

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

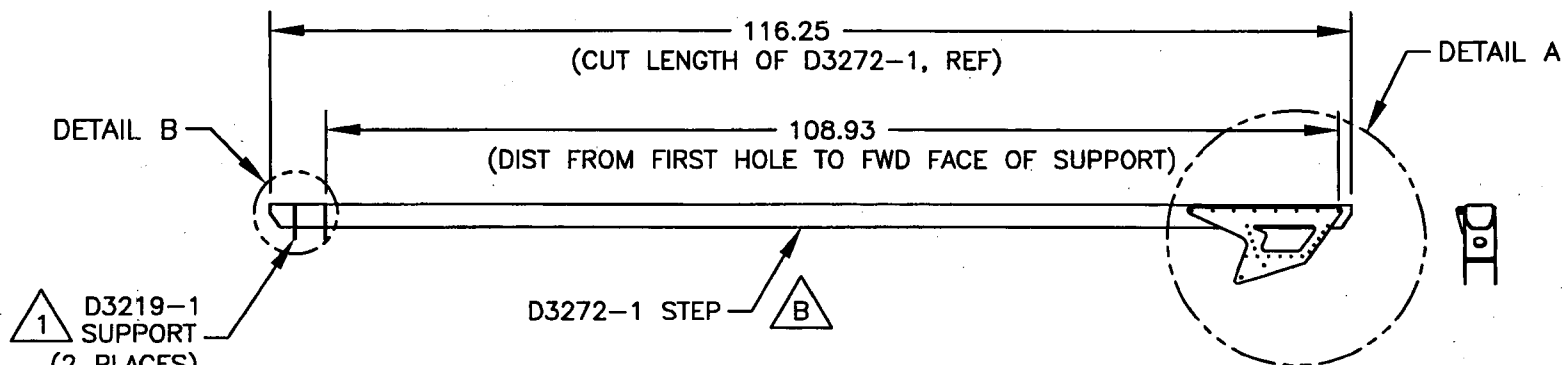
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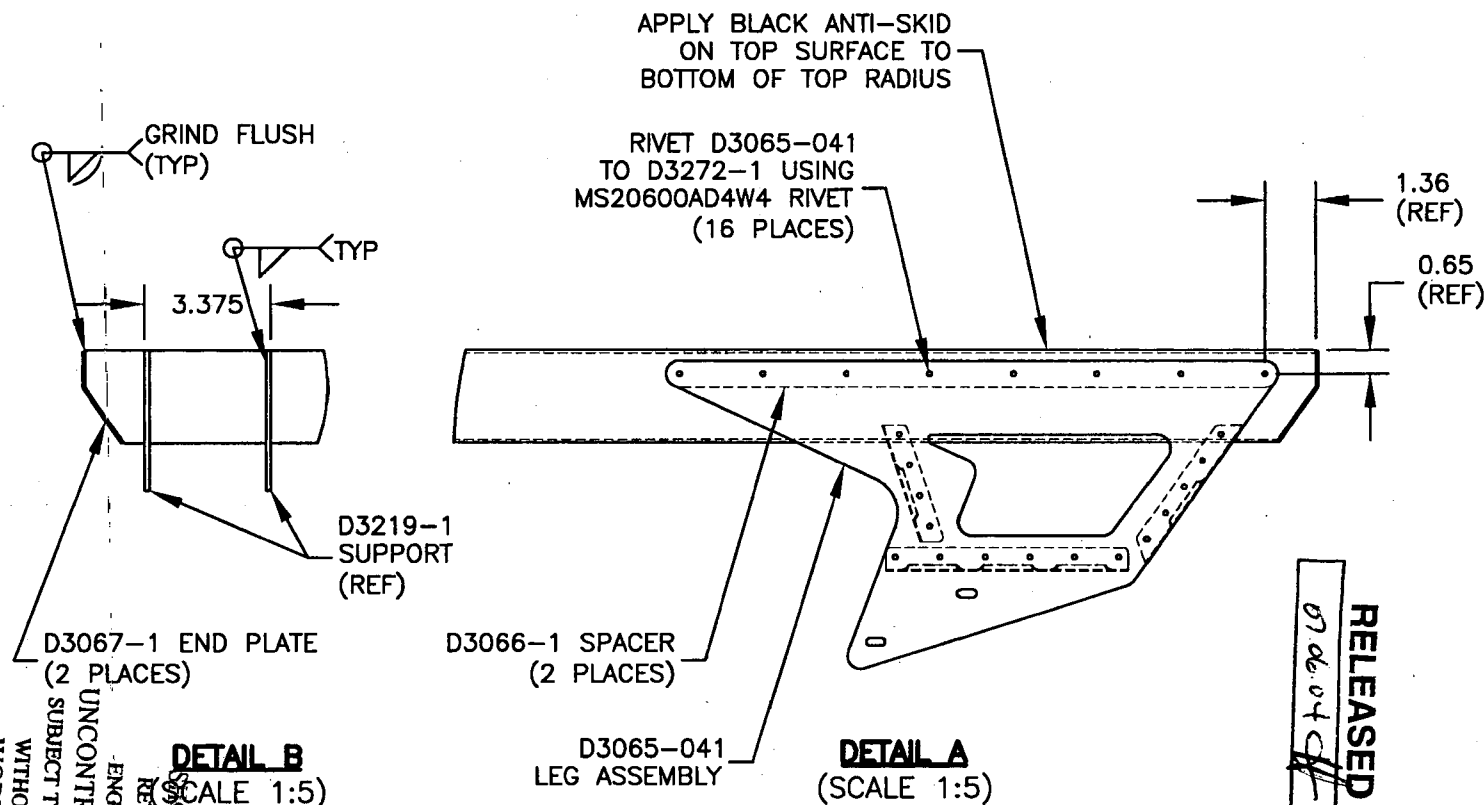
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DESIGN	q	DRAWN BY	J	DART AEROSPACE LTD
CHECKED	CE	APPROVED		HAWKESBURY, ONTARIO, CANADA
DATE	07.05.18	DRAWING NO.	D3272	REV. B
		TITLE	STEP ASSEMBLY, HI LONG	SHEET 2 OF 3
				SCALE 1:20



**D3272-041 STEP ASSEMBLY (LH. SHOWN)**  
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)



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SCALE 1:5

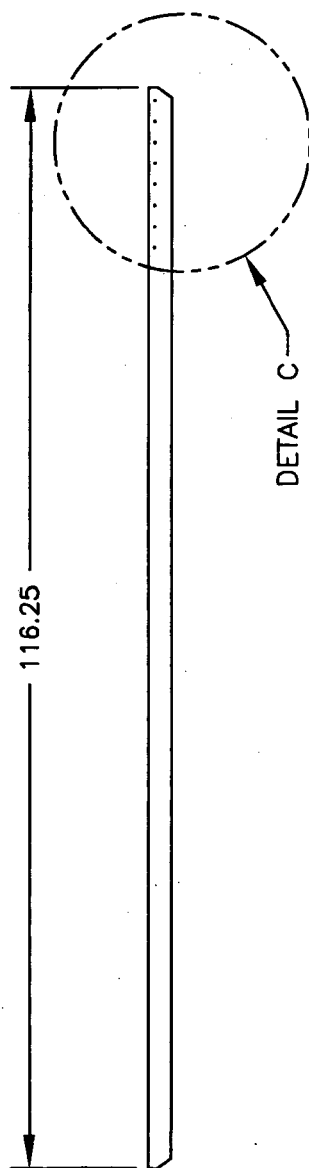




DESIGN 40	DRAWN BY [Signature]	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20

RELEASED

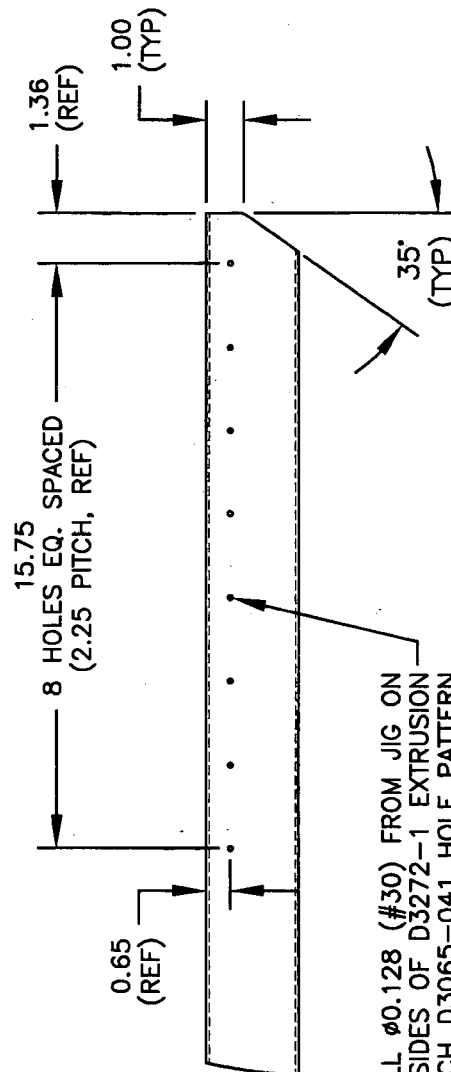
07.06.04 [Signature]



DETAIL C

**B D3272-1 STEP**

(MAKE FROM D2622-120 STEP EXTRUSION)



**DETAIL C**  
(SCALE 1:5)

DRILL  $\phi 0.128$  (#30) FROM JIG ON BOTH SIDES OF D3272-1 EXTRUSION TO MATCH D3065-041 HOLE PATTERN

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